National Institute of Environmental Health Sciences

Diurnal temperature range and daily cardiovascular mortalities among the elderly in Hong Kong

Author(s): Tam WWS, Wong TW, Chair SY, Wong AHS
Year: 2009
Journal: Archives of Environmental & Occupational Health. 64 (3): 202-206

Abstract:

The authors aimed to examine the association between diurnal temperature range (DTR) and daily mortalities due to cardiovascular disease among people aged 65 years and older in Hong Kong, China. The authors used generalized additive model to regress daily mortalities of the elderly due to cardiovascular disease on DTR and daily concentrations of air pollutants from 1997 to 2002. They also tested the effects of different lag days of DTR on mortality. Results indicate significant associations between cardiovascular mortality and DTR at lag day 1 and at lag clays 0-1 to 0-5. The largest effect was at lag days 0-3 (relative risks Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 1.017; 95% confidence interval Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 1.003-1.031). The authors recommend that special attention be paid to the elderly population to protect them from excessive diurnal variations in temperature.

Source: Ask your librarian to help locate this item.

Resource Description

Exposure : ☑

weather or climate related pathway by which climate change affects health

Air Pollution, Meteorological Factors, Temperature

Air Pollution: Ozone, Particulate Matter, Other Air Pollution

Air Pollution (other): NO2;SO2

Temperature: Fluctuations

Geographic Feature: ☑

resource focuses on specific type of geography

Urban

Geographic Location: ☑

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: Other Asian Country

Other Asian Country: China

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Cardiovascular Effect

Cardiovascular Effect: Other Cardiovascular Effect

Cardiovascular Disease (other): cardiovascular disease mortality

Population of Concern: A focus of content

Population of Concern: ☑

populations at particular risk or vulnerability to climate change impacts

Elderly

Resource Type: ☑

format or standard characteristic of resource

Research Article

Timescale: ☑

time period studied

Time Scale Unspecified